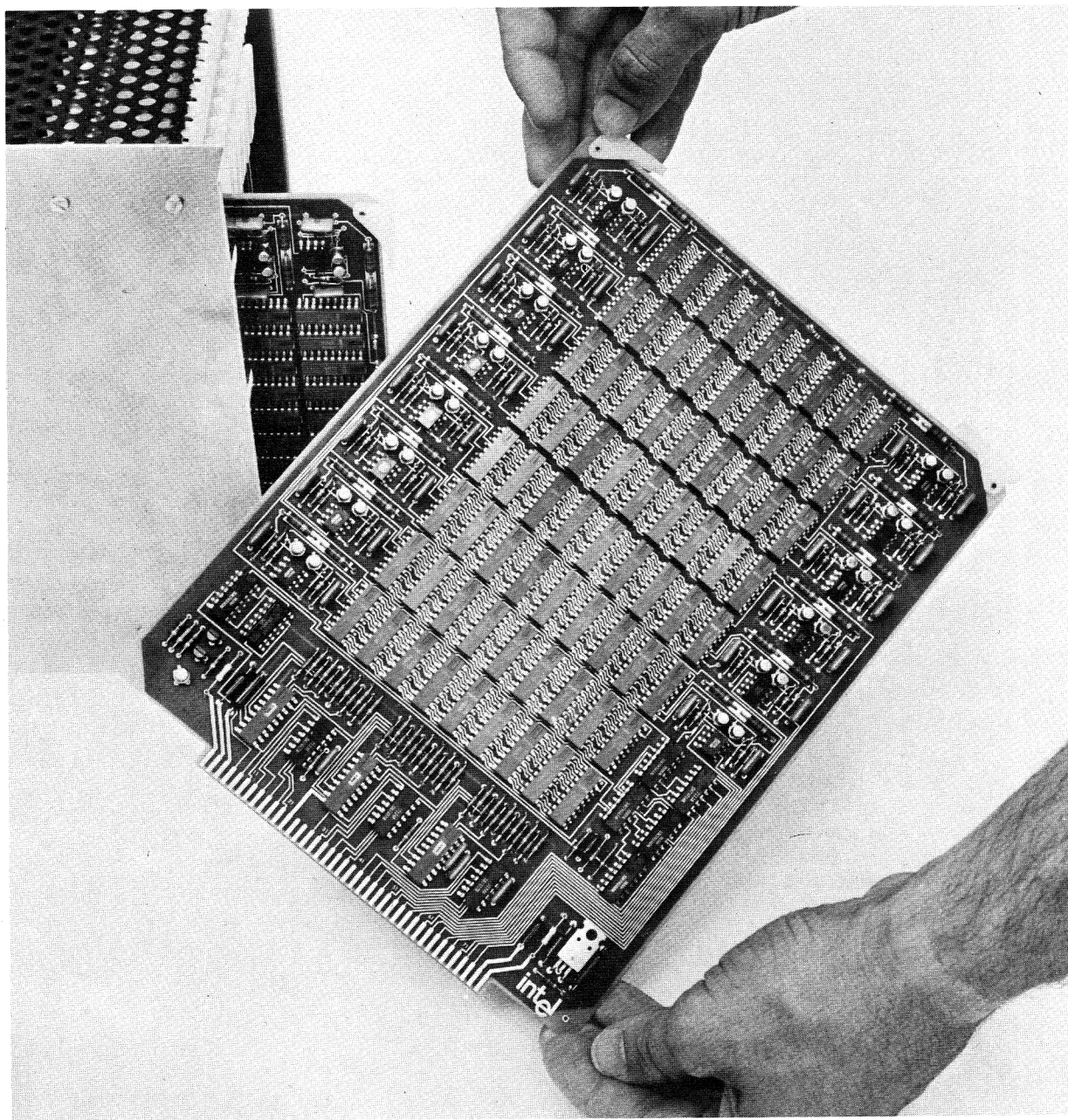


## in-10 MEMORY SYSTEM



### in-10 SERIES RAM MEMORY FEATURES:

- Low Cost Memory
- High Reliability
- Modular Expandability
- Module Interchangeability
- Automatic Refresh
- Fast Cycle Time
- Low Power Requirements
- Compact Size
- Field Expandable

The in-10 RAM Memory System is designed to meet the high reliability and low price requirements of large volume memory applications. The in-10 features the use of the Intel 1103 MOS chip. This memory system features a basic 4K x 18 or 8K x 9 configuration consisting of two plug-in boards: A memory board (MU) and a control board (CU). The control board is capable of operating up to 32K words x 18 bits or 65K words x 9 bits.

## SYSTEM in-10 SPECIFICATIONS

### Dimensions:

Memory Board:	8.175 Inches	High
(4K x 18 or 8K x 9)	10.5 Inches	Deep
	0.5 Inches	Wide

To expand to 32K x 18 add 0.5 inches per memory card. Only one control card (CU) is needed for systems up to 32K x 18 or 64K x 9.

Memory System:	8.175 Inches	High
(32K x 18)	10.5 Inches	Deep
	5.0 Inches	Wide

### Capacity:

1024, 2048, 4096, 8192 words expandable in cards to 32,768 x 18 or 65,536 x 9 capacity.

### Word Length:

8, 9, 10, 12, 16, or 18 bits in a single memory card. Longer word lengths can be accommodated by combining memory cards.

### Cycle Time:

in-10	450 Nanoseconds
in-12	675 Nanoseconds
in-14	950 Nanoseconds

### Access Time:

in-10	325 Nanoseconds
in-12	450 Nanoseconds
in-14	550 Nanoseconds

### Operational Modes:

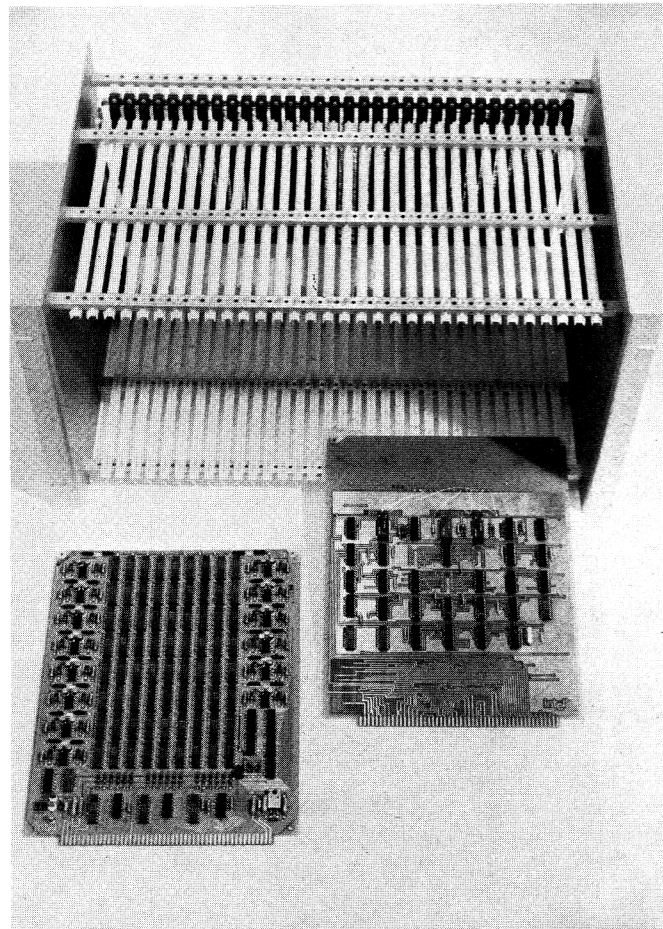
Read  
Write  
Read/Modify/Write (Optional)

### Interface Characteristics:

TTL Compatible  
Standard Input Lines:  
  Cycle Initiate  
  Byte Control  
  Read/Write  
Standard Output Lines:  
  Data Available  
  Memory Busy

### Environment:

Temperature:	0°C to +50°C operating ambient -40°C to +125°C non-operating
Relative Humidity:	Up to 90% with no condensation
Altitude:	0 to 10,000 feet operating Up to 50,000 feet non-operating



### D.C. Power Requirement:

in-10:	Voltage	Regulation
	+3.5V (Stacked on 19.7V)	±10%
	+19.7	±5%
	+ 5	±5%
42 Watts (basic 4K x 18) (16 watts per additional 4K)		

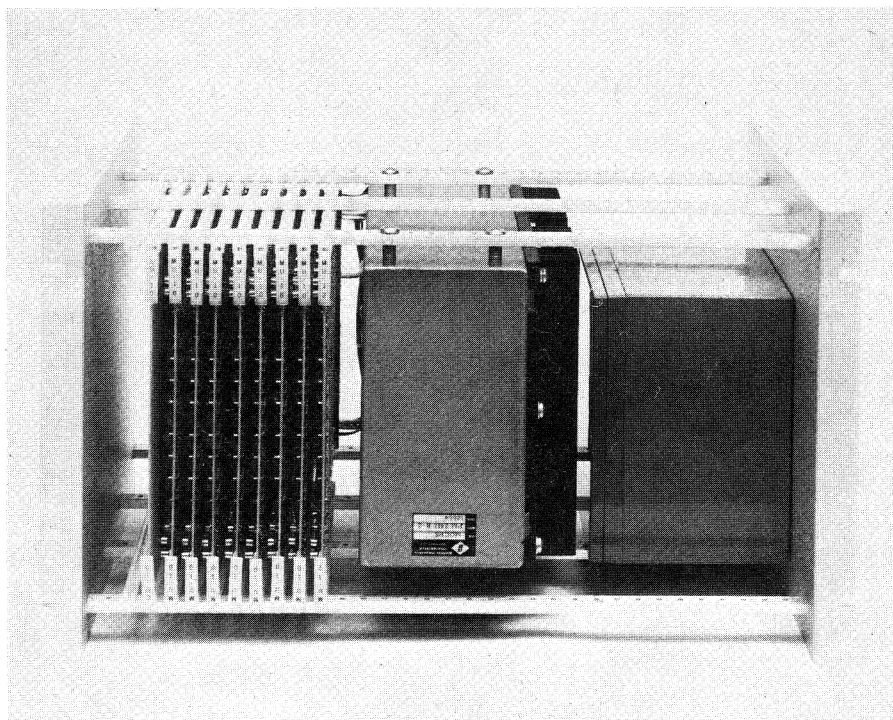
in-12 & 14:	Voltage	Regulation
	+3.5V (Stacked on 16.7V)	±10%
	+16.7	±5%
	+ 5	±5%
35 Watts (basic 4K x 18) (12 watts per additional 4K)		

### Features:

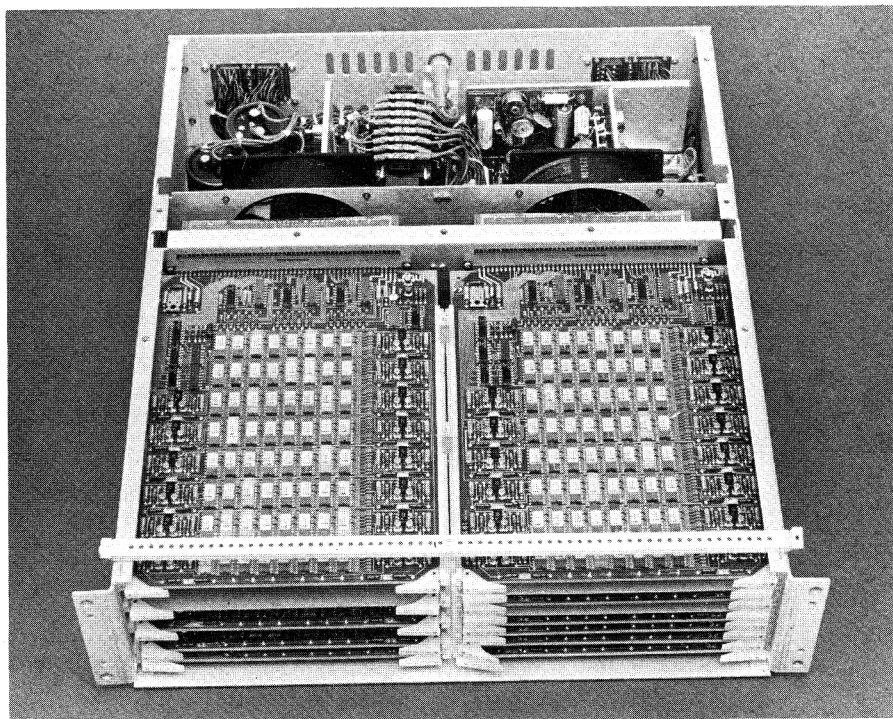
Byte Control (2 Zones Maximum)  
Module Select  
Address Register  
Data Register (Optional)  
Basic System Available As 4K x 18 or 8K x 9

### Special Options:

INTEL also offers the in-10 mounted in a card chassis. This chassis is designed for mounting in 19" relay racks.

**in-10 MEMORY SYSTEM**

in-10 Series Memory configured as a 32k x 18 system mountable in a 19" relay rack with power supply and battery included. Memory cards are 4k x 18 each and are controlled by one control card. An optional memory tester is also available. (See page 7-21 for details.)



in-series horizontal chassis features up to 18 cards with fan assembly and power supply mounted in the rear. This chassis is rack mountable in a 19" relay rack and is available in 5¼ and 7½ inch heights. See your local Intel sales representative for more information.